

Listing of Claims

1. (Previously Presented) A venous filter comprising
at least two struts each having a connected end and a non-connected end, wherein each of said struts further comprises a strut portion and an anchor portion, and wherein the strut portion and the anchor portion fit together via a positive and a negative thread, and wherein the thread on either of said strut portion, said anchor portion, or both comprises an electrolytically active thread that erodes quickly; and

a head, wherein said head connects said connected ends of said struts, wherein said strut portion can be separated from said anchor portion at least in part by the application of an electrical current.

2. (Original) The venous filter of claim 1, wherein said electrolytically active threads are on said strut portion.

3. (Original) The venous filter of claim 1, wherein said electrolytically active threads are on said anchor portion.

4. (Original) The venous filter of claim 1, wherein said electrolytically active thread comprises platinum, rhodium, palladium, rhenium, tungsten, gold, silver, tantalum, stainless steel, nickel, titanium, copper, zinc, benzillium, silicon, tin, aluminum, gallium, or combinations thereof.

5. (Previously Presented) A venous filter comprising
at least two struts, each having a connected and a non-connected end, wherein each of said struts comprises a strut portion, a temperature sensitive portion and an anchor portion, wherein said temperature sensitive portion is comprised of a temperature sensitive material different from the anchor portion, and wherein said material is located between said strut portion and said anchor portion and provides for separation of the anchor portion from said temperature sensitive portion upon removal of the venous filter at least in part by changing the temperature around at least said temperature sensitive portion; and

a head, wherein said head connects said connected ends of said struts.

6. (Original) The venous filter of claim 5, wherein said temperature sensitive portion comprises nickel-titanium alloys, copper base alloys, or combinations thereof.

7. (Original) The venous filter of claim 6, wherein said temperature sensitive portion comprises nitinol.

8. – 13. (Cancelled)

14. (Previously Presented) The venous filter of claim 1, wherein said filter has a shape selected from the group consisting of a web, a spiral, and a conical shape.

15. – 19. (Cancelled)

20. (New) The venous filter of claim 1, wherein said electrolytically active threads erode in less than about two minutes upon application of a current of 0.01-2 milliamps at about 0.1 to 15 volts.

21. (New) The venous filter of claim 1, wherein said electrolytically active threads erode in less than about one minute upon application of a current of 0.01-2 milliamps at about 0.1 to 15 volts.

22. (New) The venous filter of claim 1, wherein said electrolytically active threads comprise a nickel/titanium alloy, a copper/zinc alloy, a nickel/aluminum alloy, or combinations thereof.

23. (New) The venous filter of claim 1, wherein the at least two struts are made of an electrolytically active material, and wherein the at least two struts are covered by insulating material except for the positive thread, the negative thread, or both the positive thread and the negative thread.

24. (New) The venous filter of claim 5, wherein said temperature sensitive portion comprises a shape memory alloy.

25. (New) The venous filter of claim 5, wherein said temperature sensitive portion becomes more flexible as the temperature of said temperature sensitive portion is reduced below a normal body temperature.

26. (New) The venous filter of claim 5, wherein said temperature sensitive portion becomes more flexible as the temperature of said temperature sensitive portion is increased above normal body temperature.

27. (New) The venous filter of claim 5, wherein said temperature sensitive portion is configured to coil when the temperature of said temperature sensitive portion is below a normal body temperature.

28. (New) The venous filter of claim 5, wherein the anchor portion comprises a hook, and wherein the temperature sensitive portion is configured to become disengaged from the hook when the temperature of said temperature sensitive portion is reduced below a normal body temperature.

29. (New) The venous filter of claim 5, wherein the anchor portion is at least partially covered by a sleeve, and wherein the sleeve is made of a material that does not change configuration when exposed to a change in temperature.